BEFORE YOU BEGIN......

Please note that the terms and symbols used in this document are as follows: <E> means press "ENTER" ; Sh means a shifted character

Our tapes load best, at least on our CTR-41's, at a volume setting of 6 to 6 1/2. Other recorders may vary, so try your favorite setting first.....Remember, there are two passes of each program on each side of the cassette.

INTRODUCTION

TSHORT is an object file especially designed to ease the tedium of typing difficult-to-type statements, such as "LEFT$(" & "CHR$(", and the ones used over and over such as "RETURN" & "GOSUB".
TSHORT contains a library of 31 fixed, and one programmable, command words. Each word is selected by a single, shifted key entry and is typed in its entirety on the monitor screen. Some statements contain an automatic ENTER (<E>) within them. These are:
  - Sh ENTER = (GOTO10 <E>)
  - Sh BREAK = (CONT <E>)
  - and if preprogrammed, Sh K = (KUSTOM <E>)
  - The LEVEL II version also has a Sh Q (SYSTEM <E>) key
    to ease loading of SYSTEM tapes.

To aid in identifying each statement vs. its respective key, especially if you've been away from the computer for some time, white-on-clear, self adhesive decals are provided for installation on your keyboard. When carefully installed, they give the keyboard that "factory made" look.
The decals and program are upwardly compatible with the transition from LEVEL II to DOS with 10 of the LEVEL II commands replaced with DOS commands

SECTION I.....LEVEL II

To load and run the LEVEL II TSHORT, (562 bytes), one need only power up, answer MEMORY SIZE with <E> (unless you need it for a high memory object file), load and initialize any SYSTEM tape other than TSHORT , including any key debounce program first, then type SYSTEM <E>, load TSHORT in recorder, type TS<E>, then after TSHORT has sucessfully loaded, type / <E>. TSHORT will now display the copyright notice and prompt for a KUSTOM entry. You may type a KUSTOM string of up to 64 characters, consisting of anything on the keyboard (including Sh chtrs and <E>) except BREAK. BREAK terminates this mode, either following a KUSTOM string or as a default at KUSTOM prompt. Now, except for installing the decals (see SECTION III), you may CLOAD (or LOAD) a program for editing or start typing a new one.
If, at any time, you wish to change the KUSTOM key, simply type NAME <E>. (see SECTION IV, NAME, for "NAME" variation). You will again be asked to type the KUSTOM string, terminating with BREAK. This will not disturb other programs already in memory including BASIC.

SECTION II........Disk TSHORT

Your DOS versions of TSHORT may be loaded & executed directly via SYSTEM fn:TS, (Entry is via /27725 for TSHORT or /28381 for TSHORTR - Do not use / <E>!!), or preferably saved on disk using the TAPEDISK utility. Both TSHORT and TSHORTR are loaded from the cassette tape at the same time and then saved to disk with TAPEDISK. The following sequence will put both versions of TSHORT on disk:
  1. Boot DOS, type TAPEDISK<E>
  2. Prepare the tape to be read
  3. Answer the ? prompt with C<E>
  4. While the tape is loading, prepare the destination
     diskette to recieve the object files. Then type:
  5. F TSHORT/CMD:d 6A30 6C72 6A30<E> , where d = drive #
     then:
  6. F TSHORTR/CMD:d 6CC0 6F02 6CC0<E>
  7. Now type E<E> to return to "DOS READY?"

TSHORT is now ready to load as a CMD file from DOS.

Following power up, load all CMD files you are using prior to loading TSHORT, then type TSHORTR or TSHORT depending on whether or not you are using BASICR, and hit ENTER.

Then load BASIC in the normal manner, answer the NO. OF FILES? and MEMORY SIZE? prompts as required,----THEN----BEFORE LOADING BASIC FILES OR TYPING ANY LINE NUMBERS, Type LPRINT<E> (no, you won't lock up this one time, even without a printer!). You have just initialized TSHORT and should have the copyright notice and the KUSTOM prompt on screen.

Refer to SECTION I, paragraph 2, for programming KUSTOM.

SECTION III.....DECAL INSTRUCTIONS

Some care should be exercised when installing your keytop decals:
        1. Wipe the front of all keytops clean of all dust, dirt, and greasy deposits. (window cleaner or rubbing alcohol are good cleaners for this.)
        2. Gather a sharp EXACTO knife , a pair of tweezers, a dark mat or cloth, (for contrast if you drop a decal), and a bright lamp
        3. Gather a pair of steady hands and eyes. If not your own, try someone who builds miniature models.....The small nature of the decals is necessary to obtain that neat, "factory" look.
        4. Tape the strip down at both ends to something firm such as a piece of cardboard, and using a straight edge (a credit card is super), cut through the top film between each word from one edge of the strip to the other.
        5. Then, using the knife point or tweezers, lift each decal from the backing and install one at a time, aligning the bottom edge with, or slightly below, the top of the key in front, (see ad picture), following the sequence shown below
        6. For practice , we suggest you cut off the F1 & F2 decals, found at the bottom of the strip, and place them on any pair of keys to get the feel of the installation.

        * skip these if you have DOS, the correct ones will be installed later.

KEY	LABEL	KEY	LABEL	KEY	LABEL
*1	Q = SYSTEM	*13	DN ARROW = CLOAD?	23	ENTER = GOTO10
*2	W = RND(	14	A = STRING$(	*24	CLEAR = CSAVE"A
*3	E = ELSE	15	S = GOSUB	*25	Z = #-1,
4	R = RETURN	*16	D = DATA	*26	X = STR$(
5	T = THEN	17	F = LEFT$(	27	C = CHR$(
6	Y = LEN(	18	G = GOTO	*28	V = VAL(
7	U = USING	19	H = RIGHT$(	29	B = INT(
8	I = INPUT	20	J = INKEY$	30	N = NEXT
*9	O = ASC(	21	K = KUSTOM	31	M = MID$(
10	P = LPRINT	22	L = LIST	32	SPACE = EDIT
11	BRK = CONT				
12	RT ARROW = TAB(				

DECALS FOR DOS   (Save these for later use if you have LEVEL II)

1	Q = MKI$(	6	D = FIELD
2	W = MKS$(	7	CLEAR = CLOSE
3	E = MKD$(	8	Z = CVI(
4	O = OPEN"	9	X = CVS(
5	DN ARROW = INSTR(	10	V = CVD(

If you damage some of the decals, please return the pieces with a list and we will replace those decals you need.

KEYBOARD DEBOUNCE

   Altho TSHORT does not contain a debounce routine, it does locate and use
any resident debounce routine already running in memory. If your key
bounce is only occasional, TSHORT may reduce or eliminate it anyway.

KUSTOM ....suggested uses of KUSTOM follow:
            1. A popular subroutine: GOSUB 30100
            2. Invoke a USR routine: DEFUSRn = &Hnnnn: A = USRn (0)<E>
            3. PRINT MEM <E>
            4. CHR$(nnn)+CHR$(nnn)+CHR$(nnn)+etc. (Useful for
               graphics strings, edit actual values later.)
            5. SAVE"MYPROGM/BAS.PASSWORD:1 (Saves time and
               mistakes when periodically saving a developing
               program.)

MEMORY INFORMATION

   FOR DOS....TSHORT & TSHORTR, load into two areas of memory. One just
above the end of Disk Basic 2.2 from 27184 to 27762 , and the other just
above BASICR 2.2 from 27840 to 28418 .
   TSHORT moves all user Basic pointers to point to an area just above the
end of itself. All LOADs and SAVEs function as if TSHORT was not there.
   TSHORTR may be run with all known Disk Basic systems because it loads
into the highest position above the interpreters, Conversely, TSHORT will
not run with BASICR due to a overlap in memory usage.
   Altho TSHORT (DOS) is approximately 580 bytes long, when TSHORT is run
with 2.1 DOS or NEWDOS, a reduction of an additional 373 bytes occurs due
to the space between the end of the interpreter and the start of TSHORT.
With TSHORTR a space of 1028 bytes occurs. These areas may be used for USR
routines or POKE'd temporary data storage. These areas, while TSHORT is in
memory, are safe from Basic and all but the worst reboot, with no need to
respond to MEMORY SIZE? The following table should be useful in utilizing
this memory area:

            DOS 2.1 w/TSHORT.......26811 to 27183 inclusive. (373 bytes)
            DOS 2.1 w/TSHORTR......26811 to 27839 inclusive. (1028 bytes)
            DOS 2.2 w/TSHORTR (no BASICR)..27171 to 27839 incl. (669 bytes)

TSHORT on/off FOR LOWERCASE

   TSHORT OFF....for the convience of those who use a lower case mod, TSHORT
         may be turned off by one of the following:
            1. For LEVEL II only, type Sh Q /17136 <E>
            2. type SYSTEM <E> then type /27201<E> for TSHORT, or
               /27857<E> for TSHORTR.
            3. Type DEFUSRn=&Hnnnn : A=USRn (0)<E>, where nnnn = 6A41
               hex for TSHORT or nnnn = 6CD1 hex for TSHORTR.

   TSHORT ON....these methods are available
            A. type NAME <E> for DOS or LEVEL II, unless an error
               message occurs, then:
            B. SYSTEM<E> then /27211<E> for TSHORT or /27867<E>
               for TSHORTR.
            C. or as in 3 above where nnnn = 6A4B & 6CDB respectively.
            D. For LEVEL II type SYSTEM <E>, /17146 <E>.

Lines B and C are the only ways available to change the KUSTOM string with BASICR because it uses NAME for its renumber function. Also, after certain re-boot & BASIC * (program recovery) operations, the NAME command may not work for KUSTOM, or TSHORT may appear to be turned off completely. In this case simply use lines B or C above.

KEY FUNCTIONS......HIGHLIGHTS

1. Sh ENTER = GOTO 10<E> where Line 10 may contain RUN
   20, or a soft entry (no data lost) through a GOTO nnnn.
2. Sh BREAK = CONT<E>, the opposite!
3. KUSTOM will hold and execute anything on the
   keyboard except BREAK & BACKSPACE.
4. EDIT may be involked via Sh SPACE or Sh ZERO (0)
5. PRINT is the same as before, ie: "?".
6. Due to the high probability of forgetting the
   question mark in CLOAD?, this word was chosen vs.
   CLOAD. A single backspace gets CLOAD if desired.
7. Wherever possible, words are placed on or near the
   keys which either represent the first letter of the
   word or are logically related, such as TAB(.
9. Shift UP ARROW, LEFT ARROW, and @ work in their
   normal manner and are not recognized by TSHORT.

SECTION V......OPTIONS, WARRANTY

There are presently two options available:
   1. TSHORT relocated in high memory, set up to operate like any other high memory program, exact location specified by customer. Specify for LEVEL II, 2.1, or 2.2. This version is added to the standard tape as two additional passes on the LEVEL II side. TSHORT customers must return their original tape for this addition. Price is $14.95. Previous customers receive a $9.95 credit.
   2. Custom keys are available, including custom decals. Write for details.

Dealer discounts are available for the above options.

WARRANTY

Although WEB ASSOCIATES has made a reasonable test effort of their software, and believe it to be compatible with most known systems software, it is distributed on an as is basis.
      NO OTHER WARRANTY, EITHER EXPRESSED OR IMPLIED, EXISTS.

NOTE: Good programming practice dictates that the user should thoroughly test this program before using it with valued data or applications.

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